



0000047836

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER

Chairman

WILLIAM A. MUNDELL

Commissioner

MARC SPITZER

Commissioner

MIKE GLEASON

Commissioner

KRISTIN K. MAYES

Commissioner

Arizona Corporation Commission

DOCKETED

APR 12 2006

DOCKETED BY

AK

IN THE MATTER OF ARIZONA PUBLIC
SERVICE COMPANY - APPLICATION
FOR APPROVAL OF ITS ENERGY WISE
LOW INCOME WEATHERIZATION
PROGRAM (A DEMAND-SIDE
MANAGEMENT PROGRAM)

DOCKET NO. E-01345A-05-0414

DECISION NO. 68647ORDER

Open Meeting
April 4 and 5, 2006
Phoenix, Arizona

BY THE COMMISSION:

FINDING OF FACT

1. Arizona Public Service Company ("APS") is certificated to provide electric service as a public service corporation in the State of Arizona.

2. On June 6, 2005, APS filed an application for approval of its Energy Wise Low Income Weatherization ("Energy Wise") program as required by Decision No. 67744. Decision No. 67744 approved the rate case settlement agreement that included a provision (paragraph No. 42) for APS to file the application within 60 days of the Commission's approval of the settlement agreement.

3. On July 26, 2005, APS filed a revised page 5. Changes were made to the wording under "APS administration" and to the table on cost effectiveness. APS refiled the same page on November 14, 2005, to change a number used in the discussion of number of homes to be served.

...

...

4. The proposed program is an expansion and modification of a current program. A version of the Energy Wise program was pre-approved by Staff on December 21, 1998.¹ The Energy Wise program is one of several demand-side management ("DSM") programs that was included in the "Preliminary Energy Efficiency DSM Plan" approved in Decision No. 67744. This program was discussed within the DSM collaborative group.

Program Description

5. The Energy Wise program is available to APS residential customers with household incomes less than or equal to 150 percent of federal poverty guidelines. Under the expanded program, customers on tribal lands would be included.

6. The program consists of four components: Weatherization, Health and Safety, Repair and Replacement, and Bill Assistance. The maximum expenditure per home in a 12-month period for Weatherization, Repair and Replacement, and Health and Safety combined is \$6,000.

Weatherization

7. The Weatherization component provides an assessment of a house and appliances to determine what cost-effective measures are needed to improve energy efficiency and then installs the measures. Weatherization will be conducted in accordance with the rules of the federal Weatherization Assistance Program ("WAP"). WAP is funded by the U.S. Department of Energy and administered by the Arizona Department of Commerce Energy Office ("Energy Office"). The APS program is independent of WAP, but APS funds are leveraged with other funding sources.

8. The WAP rules cover topics such as energy audit procedure, fuel switching, cost effectiveness priority lists per climate zone, pressure diagnostic procedure, and potential hazard considerations. APS would allow exceptions to the WAP rules as follows:

- a. measures are limited to those that conserve primarily electric energy;
- b. waivers for exceptions in special cases are subject to APS approval; and
- c. general repairs may also be done, as long as the entire project is cost-effective.

...

¹ The Commission, in Decision No. 59601, had delegated to Staff the authority to pre-approve APS' DSM programs.

1 9. General repairs may include repairs to membranes to stop roof leaks, repairs to or
2 replacement of window units, repairs to or replacement of exterior doors, the restoration or
3 replacement of ceiling areas which cannot support insulation, and the restoration or replacement of
4 floor areas over crawl spaces which are not structurally strong enough to remain part of the
5 building envelope.

6 10. Customers in rented homes would be eligible for weatherization services with the
7 owner's written permission, but the owner must agree to not increase the rent for 12 months.
8 Weatherization projects for master metered and/or multifamily housing would be considered by
9 APS on a case by case basis.

10 Health and Safety

11 11. The Health and Safety component pays for the installation of energy-efficient
12 window unit air conditioners and heat pumps that are prescribed by a medical doctor.

13 Repair and Replacement

14 12. The Repair and Replacement component allows for the repair or replacement of
15 existing appliances. Appliances are replaced only when repair costs would exceed replacement
16 costs or when an appliance would be inoperable or unsafe even with repairs. The program does
17 not provide for maintenance of the appliances. The appliances are limited to air conditioners, heat
18 pumps, evaporative coolers, refrigerators, and water heaters. Renters would be allowed to
19 participate.

20 Bill Assistance

21 13. Bill Assistance is used to pay electric bills for customers in crisis situations. A
22 household may receive assistance once in a 12-month period for a maximum of \$400. The crisis
23 situations, as defined by the Arizona Department of Economic Security, Community Services
24 Division, are:

- 25 a. loss or reduction of income;
- 26 b. unexpected or unplanned expenses that caused lack of resources; or
- 27 c. a condition that endangers the health or safety of the household.

28 ...

Delivery Strategy

14. Under the proposed expansion, the Energy Wise program would be delivered through the eight Community Action Agencies ("CAAs")² that serve APS areas and Tribal Governments. APS would provide overall program management for Energy Wise. A third-party manager may oversee routine administration and compliance issues. The CAAs and Tribal Governments would leverage Energy Wise funds with funds from other sources including the federally funded Low Income Housing Energy Assistance Program ("LIHEAP"), the U.S. Department of Energy, and various utility companies as appropriate.

Marketing

15. Energy Wise will be marketed through the following means:

- a. CAAs and Tribal Governments will hand out informational brochures in their offices and leave them in homes;
- b. APS Customer Care Associates will be trained to inform customers about the program;
- c. APS will promote the program in electric bills;
- d. With permission, signs will be placed near homes during the weatherization process.
- e. With permission, window stickers will be placed on windows of homes that have been weatherized.

16. Staff has recommended that APS describe its marketing activities and provide copies of brochures and other marketing materials in its semi-annual reports filed with the Commission.

Monitoring and Evaluation

17. Energy savings will be evaluated by comparing utility bills of houses before and after weatherization. The Energy Office will compile and analyze the data and prepare annual reports.

...

Program Budget

² CAAs were formed by the federal Economic Opportunity Act in 1964 to provide a variety of social services.

18. The proposed annual budget for the expanded Energy Wise program is detailed in Table 1 below. Almost 87 percent of the funds would be distributed to the CAAs and Tribal Governments to implement the program. The remaining 13 percent of the budget is used by APS for program support.

Table 1
Energy Wise Annual Budget

Budget Category	Annual Budget Amount
Implementation Costs (Allocated to CAAs and Tribal Governments):	
Weatherization ¹	\$479,400
Health and Safety ²	\$14,100
Repair and Replace ³	\$70,500
Program Delivery ⁴	\$141,000
Bill Assistance ⁵	<u>\$250,000</u>
Total Implementation Costs	\$955,000
Percent of Total Budget	86.8%
Program Support Costs:	
Third Party Management ⁶	\$50,000
Training, Technical Support, Monitoring and Evaluation ⁷	\$10,000
Marketing and Promotion ⁸	\$10,000
APS Administration ⁹	<u>\$75,000</u>
Total Program Support Costs	\$145,000
Percent of Total Budget	13.2%
Total Energy Wise Costs	\$1,100,000
¹ direct costs of providing weatherization services, including labor and materials ² costs for window unit air conditioners and heat pumps prescribed by doctor ³ costs for repair or replacement of appliances ⁴ expenses incurred by CAAs and Tribal Governments, including employee and office costs ⁵ funds used to pay electric bills for customers ⁶ coordinates record keeping, invoicing, and reporting; reviews invoices for compliance ⁷ funds for the Energy Office to provide these services ⁸ brochures and signage ⁹ includes costs for an Account Executive at APS	

19. Decision No. 67744 provides for at least \$1 million to be spent annually on the low income weatherization program. Up to \$250,000 of the \$1 million may be used for bill assistance during any calendar year. If APS does not spend the entire \$250,000 on bill assistance, the balance would be available for weatherization.

20. The implementation funds would be distributed to the CAAs and Tribal Governments based primarily on the number of APS low income customers in their service areas. This would be the first time that Tribal Governments have received funds from the program. The Tribal Governments were given a larger share of the funds than would have been received if the allocation were based only on the number of low income customers as an attempt to make up for the years that the Tribal Governments were not part of the program and recognizing the difficulty of serving small numbers of APS customers dispersed over wide areas. In fact, the budget in APS' DSM portfolio plan for Energy Wise was increased by \$100,000 compared to the preliminary portfolio plan so that more funds could go to the Tribal Governments.

21. The first year's allocation to CAAs and Tribal Governments under the expanded program is shown in Table 2. The distribution would be reviewed and adjusted each year.

Table 2
Implementation Budget Allocated to CAAs and Tribal Governments

Agency	Budget
Community Action Human Resources Agency	\$60,000
Coconino County Community Services Dept.	\$20,000
Gila County Community Action Agency	\$60,000
Maricopa County Human Services Dept.	\$227,000
Northern Arizona Council of Governments	\$167,000
City of Phoenix Neighborhood Services	\$209,000
Southeastern Az Human Resources County	\$27,000
Western Arizona Council of Governments	\$85,000
Tribal Government - Navajo	\$46,000
Tribal Government - Intertribal Council of Arizona	\$54,000
Total Implementation Budget	\$955,000

2005 Program Results

22. Since Energy Wise is an existing program, information on program results is available in APS' semi-annual reports. The numbers of households participating in 2005 are shown in Table 3. It is clear that more households participate in Bill Assistance than in any other component of Energy Wise.

...

...

Table 3
Participation in Energy Wise

Program Component	Number of Households January-June 2005	Number of Households July-December 2005
Bill Assistance	198	327
Health and Safety	3	14
Repair and Replacement	48	63
Weatherization	74	218
Total Number of Households ³	275	555

23. APS' costs incurred in 2005 for Energy Wise are shown in Table 4. APS spends the most on Weatherization.

Table 4
APS' Incurred Costs in Energy Wise

Activity	Program Costs January-June 2005	Program Costs July-December 2005
Bill Assistance	\$33,658	\$71,760
Health and Safety	\$457	\$5,434
Repair and Replacement	\$14,295	\$14,477
Weatherization	\$65,111	\$197,141
3rd Party Manager	\$20,830	\$20,838
APS Program Support	\$50,156	\$52,077
Total Costs	\$184,507	\$361,727

Cost-Benefit Analysis

24. The cost-benefit analysis was based on information from a study conducted by the Energy Office of homes weatherized through the Southwest Gas program from July 1, 1999, though June 31, 2000. Funds from the APS program and other sources were also used for these homes. The energy use of the homes was evaluated before any weatherization work was performed, then re-evaluated after the work was completed. The study showed that 150 homes were weatherized at an average direct implementation cost of \$1,108 per home. Annual energy savings were the equivalent⁴ of 1,998 kWh per home. Since the average APS E-12 customer uses

³ Because a single household may have received more than one type of assistance, the number of households listed for the components would sum to more than the total number of households.

⁴ Energy savings include natural gas savings.

8,640 kWh per year, weatherization services resulted in an average 23 percent reduction in kWh consumption. Demand reduction was estimated to be 0.3 kW per home.⁵

25. Staff estimates that the Weatherization component of the Energy Wise Program serving 382 homes per year (based on APS' budget) would result in reduced energy consumption of 763 MWh per year and a demand reduction of 115 kW per year.

26. With the above information, Staff used the Societal Cost Test to calculate the net societal benefits of Weatherization. The Commission's 1991 Resource Planning Decision No. 57589 established that the Societal Cost Test should be used for the purposes of establishing whether a DSM program can be considered cost-effective. Under the Societal Cost Test, a program's incremental benefits to society must exceed the incremental cost of having the program in place in order for the program to be cost-effective.

27. For the Weatherization component, societal costs would include the direct implementation cost of \$1,108 per home discussed above plus the costs for delivering the program. In determining delivery costs, Staff included a portion of APS' budgeted costs for program delivery by CAAs and Tribal Governments and for program support. Since implementation costs for the Weatherization component are 59 percent of the total implementation costs for the four program components, 59 percent of the program delivery and program support costs were used in the analysis, resulting in \$442 of program costs per home.

28. Societal benefits include APS' deferred generation capacity costs (based on data from the U.S. Energy Information Administration) and avoided energy costs (generated by Staff using the production costing model UPLAN), adjusted for line losses. Other benefits include reduced water consumption and air pollution, although dollar values have not been assigned to those benefits.

29. Staff found the Weatherization component of the Energy Wise program to have net societal benefits of close to zero per home (over the 20-year average life of the measures). The ratio of benefits to costs is 1.00 (a number above 1 is considered cost-effective; a number below 1

⁵ Demand reduction was calculated by assuming half of the kWh savings percentage times the average peak demand for E-12 customers (11.5% x 2.62 kW).

1 is considered not cost-effective). APS has estimated substantial reductions in air pollution and
2 water consumption resulting from the program. With reduced energy consumption of 763 MWh
3 expected each year, the value of the reduced environmental impacts is far greater than zero. If
4 dollar values were assigned to these environmental impacts and used as benefits in the analysis, net
5 societal benefits would be positive. Therefore, Staff considers Weatherization to be cost-effective.

6 **Staff Analysis**

7 30. Staff has recommended that the Weatherization component of the Energy Wise
8 program be considered as DSM and that the costs count toward APS' DSM spending requirements
9 (\$16 million per year; \$1 million on low income weatherization program).

10 31. The Health and Safety component would not reduce energy consumption if a
11 window unit air conditioner or heat pump is installed where there currently is no such unit
12 operating. The Repair and Replacement component would also not reduce energy consumption if
13 a non-operating appliance is replaced by an operating appliance. In those situations, the measures
14 may be valuable for low income customers, but it is difficult to consider them to be DSM.

15 32. The settlement agreement, approved by Decision No. 67744, limits eligible DSM-
16 related items to energy-efficiency DSM programs, a performance incentive, and low income bill
17 assistance. Energy-efficiency DSM was defined as "the planning, implementation and evaluation
18 of programs that reduce the use of electricity by means of energy-efficiency products, services, or
19 practices."

20 33. Staff has recommended that APS be allowed to continue the Health and Safety
21 component and the Repair and Replacement component, but that the costs not be counted toward
22 APS' DSM spending requirements except in the following situations:

- 23 a. When installing (for Health and Safety) or replacing an air conditioner, heat pump, or
24 other appliance, APS may only count the incremental cost between an average
25 appliance model and a more energy-efficient appliance model toward its minimum
26 DSM spending requirements.
- 27 b. When repairing an appliance, costs for repairs may only be counted as DSM if the
28 repair results in a reduction of energy use.

1 34. The above recommendation is consistent with the conditions contained in Staff's
2 pre-approval letter for the program in 1998. The settlement agreement provided for Bill
3 Assistance to be considered as DSM and therefore the costs should count toward APS' DSM
4 spending goals.

5 **Reporting Requirements**

6 35. Staff has recommended that APS continue to report on the progress of the Energy
7 Wise program in its semi-annual reports filed with the Commission. The reports should include
8 the number of participants and costs by program component. In addition, the reports should
9 include the number of measures installed by type of measure for the Health and Safety component
10 and for the Repair and Replacement component.

11 **Program Flexibility**

12 36. On November 14, 2005, APS supplemented this application with language on
13 flexibility. After discussion at the November 15, 2005, DSM Collaborative working group
14 meeting, APS made changes to the flexibility language and filed the updated version on
15 November 21, 2005. Because the language is very similar to that which was filed in Docket
16 No. E-01345A-05-0477 for most of the other DSM programs, much of the requested flexibility is
17 simply not applicable to the Energy Wise program.

18 37. However, APS' flexibility language indicates that funding may be shifted as needed
19 between budget categories within a program. APS would notify the Commission of any budget
20 changes that would result in a significant change to a program's benefit-cost ratio, and in no case
21 would a budget change cause the benefit-cost ratio to be less than 1.0, "except for the Low Income
22 Weatherization program." APS should strive to make the Energy Wise program as cost-effective
23 as possible.

24 38. Staff has recommended that the nature/intent of the Energy Wise program and its
25 components, including significant changes to budget categories, not be changed without
26 Commission approval.

27 ...

28 ...

1 **Summary of Staff Recommendations**

2 39. Staff has recommended approval of the Energy Wise program with the following
3 requirements:

- 4 a. Staff has recommended that APS describe its marketing activities and provide copies
5 of brochures and other marketing materials in its semi-annual reports filed with the
6 Commission.
- 7 b. Staff has recommended that the costs of the Weatherization component count toward
8 APS' DSM spending requirements.
- 9 c. Staff has recommended that APS be allowed to continue the Health and Safety
10 component and the Repair and Replacement component, but that the costs not be
11 counted toward APS' DSM spending requirements except in the following situations:
- 12 i. When installing (for Health and Safety) or replacing an air conditioner, heat
13 pump, or other appliance, APS may only count the incremental cost between an
14 average appliance model and a more energy-efficient appliance model toward
15 its minimum DSM spending requirements.
- 16 ii. When repairing an appliance, costs for repairs may only be counted as DSM if the
17 repair results in a reduction of energy use.
- 18 d. Staff has recommended that the costs of the Billing Assistance component count
19 toward APS' DSM spending requirements.
- 20 e. Staff has recommended that APS continue to report on the progress of the Energy Wise
21 program in its semi-annual reports filed with the Commission, including the number of
22 participants and costs by program component, and the number of measures installed by
23 type of measure for the Health and Safety component and for the Repair and
24 Replacement component.
- 25 f. Staff has recommended that the nature/intent of the Energy Wise program and its
26 components, including significant changes to budget categories, not be changed without
27 Commission approval.
- 28

23 **CONCLUSIONS OF LAW**

24 1. APS is an Arizona public service corporation within the meaning of Article XV,
25 Section 2, of the Arizona Constitution.

26 2. The Commission has jurisdiction over APS and over the subject matter of the
27 application.

28 ...

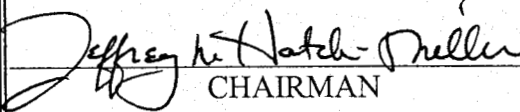
3. The Commission, having reviewed the application and Staff's Memorandum dated March 24, 2006, concludes that it is in the public interest to approve the Energy Wise program with Staff's recommendations.

ORDER

THEREFORE, IT IS ORDERED that the Energy Wise program, with the recommendations in Finding of Fact No. 39, be and hereby is approved.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION


CHAIRMAN

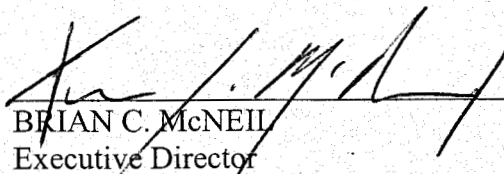

COMMISSIONER

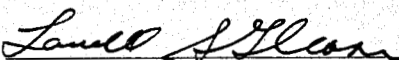
COMMISSIONER

COMMISSIONER


COMMISSIONER

IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this 12th day of April, 2006.


BRIAN C. McNEIL
Executive Director

DISSENT: 

DISSENT: _____

EGJ:BEK:lhbm

1 SERVICE LIST FOR: Arizona Public Service Company
2 DOCKET NOS. E-01345A-05-0414

3 Mr. Thomas L. Mumaw
4 Ms. Karilee S. Ramaley
5 Pinnacle West Capital Corporation
6 P.O. Box 53999, MS 8695
7 Phoenix, Arizona 85072-3999

8 Mr. Scott S. Wakefield
9 Residential Utility Consumer Office
10 1110 West Washington St., Ste. 220
11 Phoenix, Arizona 85007

12 Mr. Ernest G. Johnson
13 Director, Utilities Division
14 Arizona Corporation Commission
15 1200 West Washington St.
16 Phoenix, Arizona 85007

17 Mr. Christopher C. Kempley
18 Chief Counsel
19 Arizona Corporation Commission
20 1200 West Washington St.
21 Phoenix, Arizona 85007